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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/353,583	07/15/99	REICHGOTT S	GEN-040

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EXAMINER	
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ART UNIT	**PAPER NUMBER**
2711	2

DATE MAILED: 03/02/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/353,583	Samuel Reichgott
Examiner	**Group Art Unit**
Hai Tran	2711

☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *Three* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-41* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-41* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1- 17, 25, and 35 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "tending to indicate" renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "tending to indicate"), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d).

Regarding Claims 2, and 25 recite the limitation "said computer network" . There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 16 and 35 recite the limitation "said first memory section" and "said second memory section" . There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1- 4, 9-18, 24-27 and 30-36 rejected under 35 U.S.C. 102(b) as being anticipated by Metz et al.(US. 5,666,293).

Regarding claim 1, a set-top terminal for connecting a subscriber to a cable network, said terminal comprising:

a processor (Fig.6, element 110); and

a memory unit (Fig.6, element 120);

wherein, when a download of data or programming is offered to set-top terminal over a cable network (Fig. 1, element 15), said processor only accepts said download and records said download in said memory unit when one or more predetermined criteria are satisfied (Col.4, lines 29-34), said criteria tending to indicate that acceptance of said download will cause a minimum of interference with said subscriber's use of said set-top terminal(Col.5, lines 50-59). For instance, at col.5, line 56, Metz discloses downloading when the system is "OFF". Clearly, this meets the limitation of not interfering with the "subscribers use" as claimed since the TV would be "OFF" and not used at the time of the download.

Regarding claim 2, wherein said one or more criteria are download to said set-top terminal over said computer network (Col.5, lines 25-50).

Regarding claim 3, wherein said set-top terminal verifies that said data or programming offered as said download is not already resident in said memory (Col.5, lines 36-50).

Regarding claim 4, wherein said set-top terminal verifies that said data or programming offered as said download is specified as being intended for a class of terminals to which said set-top terminal belongs (Col.5, lines 33-35).

Regarding claim 9, wherein said set-top terminal signals said subscriber that the download is available and requests permission to accept the download, said one or more criteria including a positive response by said subscriber to said request for permission to accept said download (Col.5, lines 50-60).

Regarding claim 10, wherein said set-top terminal tunes to a specified channel to receive said download if said one or more criteria are satisfied (Col. 10, lines 1-5).

Regarding claim 11, wherein if said one or more criteria are satisfied, said processor erases information in said memory unit and replace said erased information with data or programming from said download (Col.10, lines 5-9).

Regarding claim 12, wherein following said download of programming, said processor will only execute newly-received programming from said download when one or more predetermined criteria are satisfied (Col.10, lines 10-12).

Regarding claim 13, wherein, prior to accepting said download, said processor determines whether any programming is stored in said memory which is not being executed, but which is identified as being later version than programming being executed by said processor at that time; if said processor locates any such later version of programming in memory, said processor will terminate execution of the programming being executed, erase said terminated programming

from memory and reset so as to execute said later version of said programming (Col.9, lines 55-64).

Regarding claim 14, see analysis of claim 11.

Regarding claim 15, wherein said memory unit is logically partitioned into two sections, a first section for containing programming being executed by said processor (ROM or non-volatile memory) (Col.10, lines 6-9) and a second section for receiving and storing programming from said download (RAM) (Col.10, lines 1-4).

Regarding claim 16, wherein each download of programming contains two versions of a programming object (MPEG packets stream), a first programming object for storage in and execution from said first memory section and a second programming object for storage in and execution from said second memory section, wherein said processor downloads one of said two versions of programming in accordance with whether said first and second memory is vacant (Col.15, lines 60-67 and Col.16, lines 1-30).

Regarding claim 17, see analysis of claim 15.

Regarding claim 18, 24 and 36, see analysis of claim 1.

Regarding claim 25, see analysis of claim 2.

Regarding claim 26, see analysis of claim 3.

Regarding claim 27, see analysis of claim 4.

Regarding claim 30, see analysis of claim 9.

Regarding claim 31, see analysis of claim 12.

Regarding claim 32, see analysis of claim 13.

Regarding claim 33, see analysis of claim 11.

Regarding claim 34, see analysis of claim 15.

Regarding claim 35, see analysis of claim 16.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 5, 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Metz et al.(US. 5,666,293) in view of Diehl et al. (US 5,373,557).

Regarding claims 5 and 28, Metz does not specifically show wherein said one or more criteria include a time of day. Diehl et al shows a time of day criteria is included in the download of data (Diehl et al, Col.1, lines 55-60 and Col.3, lines 5-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Metz et al by including a time of day criteria in the download data in order to determine the possibility to download during the off peak hours of use.

7. Claim 6, 19, 29 and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Metz et al.(US. 5,666,293) in view of Mankovitz(US.5,640,484) .

Regarding claim 6, Metz does not specifically show one or more criteria include whether the set-top terminal is turned off.

Mankovitz shows a criteria to check whether or not the television is turned off (Col.1, lines 65-67). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Metz et al by inserting a criteria for verifying whether or not the set-top box is off in order not to interrupt the television viewing during the download of data to the set-top box.

Regarding claim 19, 29 and 37, see analysis of claim 6.

8. Claim 20 and 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Metz et al.(US. 5,666,293) in view of Mankovitz(US.5,640,484), and further in view of Iggulden et al. (US 5,987,210) .

Regarding claim 20, Metz and Mankovitz fail to disclose that one or more criteria include detection of commercial break in television programming being received by set top terminal. Iggulden shows a processor (114) for processing the video signal to detect the presence of commercial messages (Fig.1). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Metz by inserting a video event detector to detect the criteria for commercial break in order to define the time for downloading software so it would not interfere with the viewer watching the main television program.

Regarding claim 38, see analysis of claim 20.

9. Claim 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Metz et al.(US. 5,666,293) in view of McClellan et al.(US. 5,619,250).

Regarding claim 23, Metz does not specifically show one or more criteria including a positive response by subscriber to request for permission to execute new programming. McClellan shows that subscriber usually has to request to restart the set-top box in order to reset the set-top box to new configuration (Col.3, lines 19-23). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Metz et al to include a criteria of requiring subscriber to request for permission to execute new programming in order to reset the set-top box to new configuration so it would not interrupt any current TV program being viewed.

10. Claim 7, 8, 21, 22, 39, and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over Metz et al.(US. 5,666,293) .

Claims 7, 21 and 39 read on the cable operator in Metz insuring that all set-top boxes have the latest version of software installed by a given date. This is a common practice in the computer arts so that all computers can run the latest version of software distributed by the server. Therefore, it would have been obvious to one of ordinary skill in the art to modify Metz by making sure all subscribers are updated by a given deadline in order that they all have benefit from ~~lastor~~ later versions of software that would not be useable if they were not updated.

Regarding claim 8, 22 and 40, it follows from the discussion of claim 21 that it would have been obvious to one of ordinary skill in the art to modify Metz in order to delay the downloading by deadline in the event that the set-top box was performing a recording feature so that the program being recorded would not be interrupted.

11. Claim 41 rejected under 35 U.S.C. 103(a) as being unpatentable over Metz et al.(US. 5,666,293) in view of So (US.5,909,559).

Regarding claim 41, Metz does not specifically show a set-top terminal with two processors wherein the first processor is dedicated to provide a user interface and a second processor is dedicated to manage the download process.

So shows a system with dual processors which operates multitask in dual processing mode (Fig.1, Col.129, lines 21-37 and Fig.24, Col.137, lines 45-65). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Metz by implementing a dual processors set-top terminal in order to improve the performance of multitasking task and interference with the broadcasting task by assigning the download task on one processor and the broadcasting service on the other processor.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- LaPorta et al. (US 6,014,429) shows a two-way wireless messaging system with transaction server.
- Bevins, Jr (US 5,093,921) shows an initialization technique and apparatus for set top converters.
- MacInnis (US 5,951,639) shows a multicast downloading of software and data modules and their compatibility requirements.
- Kostreski et al. (US 5,635,979) shows a dynamically programmable digital entertainment terminal using downloaded software to control broadband data operations.
- Tarr et al. (US 5,935,004) shows a system and method for scheduled delivery of a software program over a cable network.
- Houba et al. (US. 5,734,822) shows an apparatus and method for preprocessing computer programs prior to transmission across a network.
- Kanungo et al. (US. 5,966,637) shows a system and method for receiving and rendering multi-lingual text on a set top box.
- Bacon et al. (US. 5,440,632) shows a reprogrammable subscriber terminal.
- Metz et al. (US 5,978,855) shows a downloading applications software through a broadcast channel.

- Lett (US 5,771,064) shows a home communications terminal having an applications module.
- Cloutier et al. (US 5,847,771) shows a digital entertainment terminal providing multiple digital pictures.

Contact Fax Information

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or Faxed to:

(703) 308-9051, (for formal communication intended for entry)

or:

(703) 308-5399, (for informal or draft communications, please label "PROPOSED" or "DRAFT")
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is (703) 308-7372. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-5399.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

HT:ht

February 24, 2000

Andrew Faile
ANDREW I. FAILE
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